



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

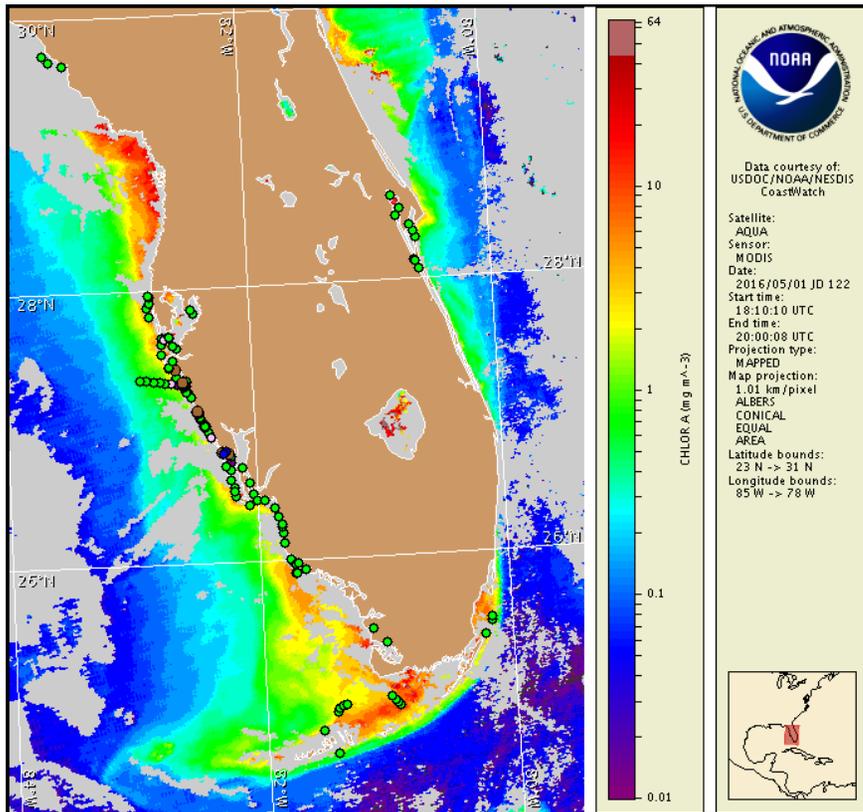
Monday, 02 May 2016

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, April 28, 2016



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from April 22 to 29: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Florida Fish and Wildlife Conservation Commission (FWC) Fish and Wildlife Research Institute. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/hab_publication/habfs_bulletin_guide.pdf

Detailed sample information can be obtained through FWC Fish and Wildlife Research Institute at:

<http://myfwc.com/redtidestatus>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: <http://tidesandcurrents.noaa.gov/hab/bulletins.html>

Conditions Report

Not present to low concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore portions of southwest Florida, and not present in the Florida Keys. *K. brevis* concentrations are patchy in nature and levels of respiratory irritation will vary locally based upon nearby bloom concentrations, ocean currents, and wind speed and direction. The highest level of potential respiratory irritation forecast for Monday, May 2 to Thursday, May 5 is listed below:

County Region: Forecast (Duration)

Southern Manatee: Very Low (M-Th)

Southern Manatee, bay regions: Low (M-Th)

Northern Sarasota: Low (M-W), Very Low (Th)

Northern Sarasota, bay regions: Low (M-Th)

Southern Sarasota: Low (M-W), Very Low (Th)

Northern Charlotte: Very Low (M-Th)

Northern Charlotte, bay regions: Very Low (M-Th)

Southern Charlotte: Very Low (M-Th)

Southern Charlotte, bay regions: Low (M-Th)

Northern Lee: Very Low (M-Th)

Northern Lee, bay regions: Very Low (M-Th)

All Other SWFL County Regions: None expected (M-Th)

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations. Health information, from the Florida Department of Health and other agencies, is available at http://tidesandcurrents.noaa.gov/hab/hab_health_info.html.

Analysis

Recent sampling indicates that *Karenia brevis* concentrations range from not present to 'low a' along- and offshore the coast of southwest Florida from southern Pinellas to Collier counties, and is not present in the Florida Keys (FWRI, MML, SCHD, CCENRD; 4/22-29). Sampling along- and offshore southern Pinellas County late last week identified not present to background *K. brevis* concentrations (FWRI; 4/27-28). In Charlotte County, recent sampling indicates that *K. brevis* concentrations range from not present to 'low a' (FWRI; 4/25-27). Samples collected from central Lee to Collier counties indicated that *K. brevis* is not present (FWRI, CCENRD; 4/27). No reports of dead fish or respiratory irritation have been received over the last several days (FWRI, MML; 4/29-5/2). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: <http://myfwc.com/redtidestatus>.

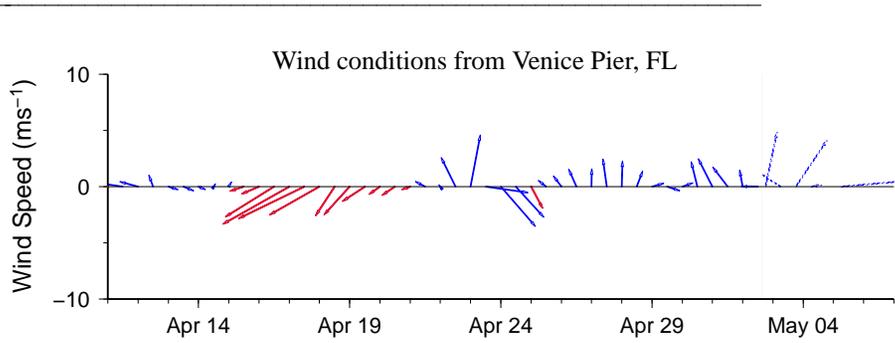
Recent ensemble imagery is obscured by clouds alongshore much of southwest Florida, limiting analysis. In MODIS Aqua imagery from 5/1 (shown left), patches of elevated chlorophyll ($2-6\mu\text{g/L}$) are visible along- and offshore southwest Florida from Pinellas to Lee Counties.

Winds forecast today through Thursday will decrease the potential for transport or intensification of surface *K. brevis* concentrations along the coast of southwest Florida.

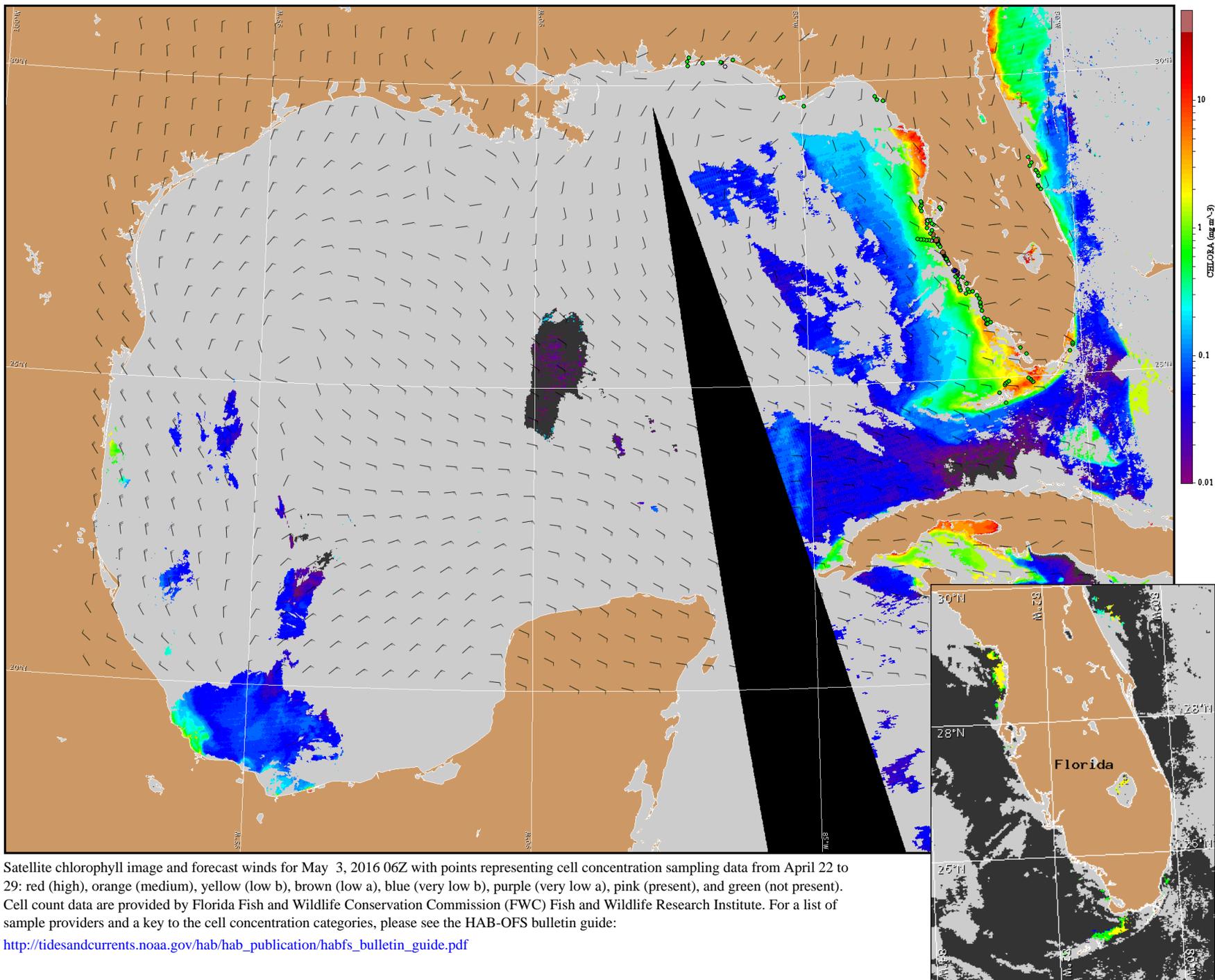
Yang, Derner

Wind Analysis

Englewood to Tarpon Springs (Venice): South to southwest winds (5-10kn, 3-5m/s) today through Tuesday. West winds (5-15kn, 3-8m/s) Tuesday night through Wednesday. Northwest winds (15kn, 8m/s) Wednesday night through Thursday.



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).



Satellite chlorophyll image and forecast winds for May 3, 2016 06Z with points representing cell concentration sampling data from April 22 to 29: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Florida Fish and Wildlife Conservation Commission (FWC) Fish and Wildlife Research Institute. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/hab_publication/habfs_bulletin_guide.pdf

Verified and suspected HAB areas shown in red. Other areas with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).